

My Project

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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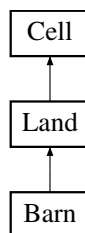
Chapter 3

Class Documentation

3.1 Barn Class Reference

```
#include <Barn.h>
```

Inheritance diagram for Barn:



3.1.1 *

Public Member Functions

- [Category getCategory \(\)](#) const

3.1.2 *

Additional Inherited Members

3.1.3 Detailed Description

[Barn](#) merupakan kelas turunan dari [Land](#) yang hanya bisa ditempati oleh [Player](#) dan [MeatProducer](#)

3.1.4 Member Function Documentation

3.1.4.1 getCategory()

```
Category Barn::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements [Cell](#).

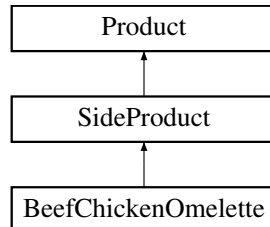
The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Barn.h

3.2 BeefChickenOmelette Class Reference

```
#include <BeefChickenOmelette.h>
```

Inheritance diagram for BeefChickenOmelette:



3.2.1 *

Public Member Functions

- [BeefChickenOmelette \(\)](#)
- [~BeefChickenOmelette \(\)](#)
- [int getPrice \(\) const](#)
- [Category getCategory \(\) const](#)
- [LinkedList< Product * > & getRecipe \(\)](#)

3.2.2 *

Additional Inherited Members

3.2.3 Detailed Description

[BeefChickenOmelette](#) adalah kelas turunan dari [SideProduct](#) yang dihasilkan dengan mix [CowMeat](#) dan [ChickenEgg](#)

3.2.4 Constructor & Destructor Documentation

3.2.4.1 BeefChickenOmelette()

```
BeefChickenOmelette::BeefChickenOmelette ( )
```

Constructor untuk inisialisasi recipe

3.2.4.2 ~BeefChickenOmelette()

```
BeefChickenOmelette::~~BeefChickenOmelette ( )
```

Dtor

3.2.5 Member Function Documentation

3.2.5.1 getCategory()

```
Category BeefChickenOmelette::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.2.5.2 getPrice()

```
int BeefChickenOmelette::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

3.2.5.3 getRecipe()

```
LinkedList<Product*>& BeefChickenOmelette::getRecipe ( ) [virtual]
```

Mengembalikan resep dari produk

Implements [SideProduct](#).

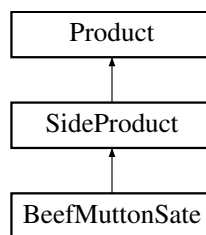
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/BeefChickenOmelette.h

3.3 BeefMuttonSate Class Reference

```
#include <BeefMuttonSate.h>
```

Inheritance diagram for BeefMuttonSate:



3.3.1 *

Public Member Functions

- [BeefMuttonSate](#) ()
- [~BeefMuttonSate](#) ()
- int [getPrice](#) () const
- [Category](#) [getCategory](#) () const
- [LinkedList](#)< [Product](#) * > & [getRecipe](#) ()

3.3.2 *

Additional Inherited Members

3.3.3 Detailed Description

[BeefMuttonSate](#) adalah kelas turunan dari [SideProduct](#) yang dihasilkan dengan mix [CowMeat](#) dan [SheepMeat](#)

3.3.4 Constructor & Destructor Documentation

3.3.4.1 BeefMuttonSate()

```
BeefMuttonSate::BeefMuttonSate ( )
```

Constructor untuk inisialisasi recipe

3.3.4.2 ~BeefMuttonSate()

```
BeefMuttonSate::~~BeefMuttonSate ( )
```

Dtor

3.3.5 Member Function Documentation

3.3.5.1 getCategory()

```
Category BeefMuttonSate::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.3.5.2 getPrice()

```
int BeefMuttonSate::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

3.3.5.3 getRecipe()

```
LinkedList<Product*>& BeefMuttonSate::getRecipe ( ) [virtual]
```

Mengembalikan resep dari produk

Implements [SideProduct](#).

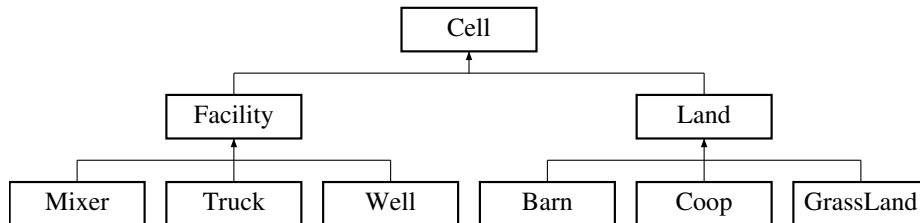
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/BeefMuttonSate.h

3.4 Cell Class Reference

```
#include <Cell.h>
```

Inheritance diagram for Cell:



3.4.1 *

Public Types

- enum [Category](#) {
WELL, MIXER, TRUCK, COOP,
GRASSLAND, BARN }

3.4.2 *

Public Member Functions

- virtual [~Cell](#) ()=0
- virtual bool [isFacility](#) () const =0
- virtual [Category getCategory](#) () const =0
- bool [getIsOccupied](#) ()
- void [setIsOccupied](#) (bool)
- virtual void [growGrass](#) ()
- virtual void [removeGrass](#) ()
- virtual bool [isGrassExist](#) () const =0

3.4.3 *

Protected Attributes

- bool [isOccupied](#) {false}

3.4.4 Detailed Description

[Cell](#) adalah kelas abstrak yang merepresentasikan petak pada Engi's farm

3.4.5 Member Enumeration Documentation

3.4.5.1 Category

```
enum Cell::Category
```

Jenis kategori [Cell](#)

3.4.6 Constructor & Destructor Documentation

3.4.6.1 ~Cell()

```
virtual Cell::~Cell ( ) [pure virtual]
```

dtor untuk [Cell](#)

3.4.7 Member Function Documentation

3.4.7.1 getCategory()

```
virtual Category Cell::getCategory ( ) const [pure virtual]
```

Return kategori dari objek kategori

Implemented in [Truck](#), [Barn](#), [Coop](#), [GrassLand](#), [Mixer](#), and [Well](#).

3.4.7.2 getIsOccupied()

```
bool Cell::getIsOccupied ( )
```

Mengambil nilai boolean isOccupied

3.4.7.3 growGrass()

```
virtual void Cell::growGrass ( ) [virtual]
```

Menambah air pada cell. Jika bertipe [Land](#) akan menumbuhkan rumput. Jika tidak, tidak akan berefek apa-apa.

Reimplemented in [Land](#).

3.4.7.4 isFacility()

```
virtual bool Cell::isFacility ( ) const [pure virtual]
```

Return true jika objek adalah [Facility](#)

Implemented in [Facility](#), and [Land](#).

3.4.7.5 isGrassExist()

```
virtual bool Cell::isGrassExist ( ) const [pure virtual]
```

Mengembalikan keberadaan grass jika [Cell](#) bertipe [Land](#)

Implemented in [Facility](#), and [Land](#).

3.4.7.6 removeGrass()

```
virtual void Cell::removeGrass ( ) [virtual]
```

Jika [Cell](#) bertipe [Land](#) dan memiliki rumput maka rumput akan dihilangkan

Reimplemented in [Land](#).

3.4.7.7 setIsOccupied()

```
void Cell::setIsOccupied (
    bool )
```

Mengganti nilai boolean isOccupied

3.4.8 Member Data Documentation

3.4.8.1 isOccupied

```
bool Cell::isOccupied {false} [protected]
```

Flag yang menandakan cell ditempati oleh sesuatu (Player/FarmAnimal/Facility) atau tidak. True bila cell sedang ditempati oleh sesuatu.

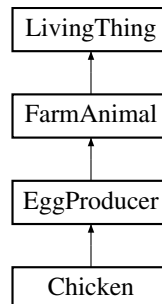
The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Cell.h

3.5 Chicken Class Reference

```
#include <Chicken.h>
```

Inheritance diagram for Chicken:



3.5.1 *

Public Member Functions

- [Chicken](#) ([Point](#) position, [Cell](#) ***&worldMap, int nRowCell, int nCollumnCell)
- [FarmProduct](#) * [produceProduct](#) ([Action](#))
- std::string [makeNoise](#) () const
- char [render](#) ()

3.5.2 *

Additional Inherited Members

3.5.3 Detailed Description

[Chicken](#) merupakan kelas turunan dari [EggProducer](#) yang menghasilkan [ChickenEgg](#) saat diinteract

3.5.4 Constructor & Destructor Documentation

3.5.4.1 Chicken()

```

Chicken::Chicken (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
  
```

Constructor

3.5.5 Member Function Documentation

3.5.5.1 makeNoise()

```
std::string Chicken::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari [Chicken](#)

Implements [FarmAnimal](#).

3.5.5.2 produceProduct()

```
FarmProduct* Chicken::produceProduct (
    Action ) [virtual]
```

Mengembalikan FarmProduk yang akan dihasilkan [Chicken](#) bila [Chicken](#) di interact

Implements [FarmAnimal](#).

3.5.5.3 render()

```
char Chicken::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan [Chicken](#) saat Hungry dan tidak Hungry

Implements [LivingThing](#).

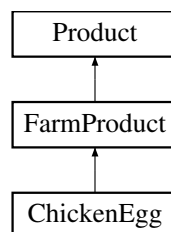
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/Chicken.h

3.6 ChickenEgg Class Reference

```
#include <ChickenEgg.h>
```

Inheritance diagram for ChickenEgg:



3.6.1 *

Public Member Functions

- int [getPrice](#) () const
- [Category getCategory](#) () const

3.6.2 *

Additional Inherited Members

3.6.3 Detailed Description

[ChickenEgg](#) adalah kelas turunan dari [FarmProduct](#) yang dihasilkan dengan interact dengan [Chicken](#)

3.6.4 Member Function Documentation

3.6.4.1 getCategory()

```
Category ChickenEgg::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.6.4.2 getPrice()

```
int ChickenEgg::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

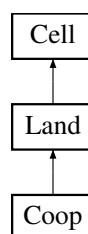
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/ChickenEgg.h

3.7 Coop Class Reference

```
#include <Coop.h>
```

Inheritance diagram for Coop:



3.7.1 *

Public Member Functions

- [Category](#) [getCategory](#) () const

3.7.2 *

Additional Inherited Members

3.7.3 Detailed Description

[Coop](#) merupakan kelas turunan dari [Land](#) yang hanya bisa ditempati oleh [Player](#) dan [EggProducer](#)

3.7.4 Member Function Documentation

3.7.4.1 getCategory()

```
Category Coop::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements [Cell](#).

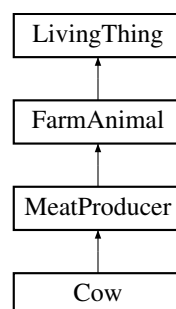
The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Coop.h

3.8 Cow Class Reference

```
#include <Cow.h>
```

Inheritance diagram for Cow:



3.8.1 *

Public Member Functions

- [Cow](#) ([Point](#) position, [Cell](#) ***&[worldMap](#), int [nRowCell](#), int [nColumnCell](#))
- [FarmProduct](#) * [produceProduct](#) ([Action](#))
- std::string [makeNoise](#) () const
- char [render](#) ()

3.8.2 *

Additional Inherited Members

3.8.3 Detailed Description

[Cow](#) merupakan kelas turunan dari [MeatProducer](#) yang menghasilkan [CowMeat](#) saat dikill

3.8.4 Constructor & Destructor Documentation

3.8.4.1 Cow()

```
Cow::Cow (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor

3.8.5 Member Function Documentation

3.8.5.1 makeNoise()

```
std::string Cow::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari [Cow](#)

Implements [FarmAnimal](#).

3.8.5.2 produceProduct()

```
FarmProduct* Cow::produceProduct (
    Action ) [virtual]
```

Mengembalikan FarmProduk yang akan dihasilkan [Cow](#) bila [Cow](#) di kill

Implements [FarmAnimal](#).

3.8.5.3 render()

```
char Cow::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan [Cow](#) saat Hungry dan tidak Hungry

Implements [LivingThing](#).

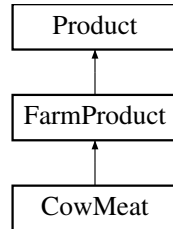
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/Cow.h

3.9 CowMeat Class Reference

```
#include <CowMeat.h>
```

Inheritance diagram for CowMeat:



3.9.1 *

Public Member Functions

- int [getPrice](#) () const
- [Category](#) [getCategory](#) () const

3.9.2 *

Additional Inherited Members

3.9.3 Detailed Description

[CowMeat](#) adalah kelas turunan dari [FarmProduct](#) yang dihasilkan dengan kill [Cow](#)

3.9.4 Member Function Documentation

3.9.4.1 getCategory()

```
Category CowMeat::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.9.4.2 getPrice()

```
int CowMeat::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

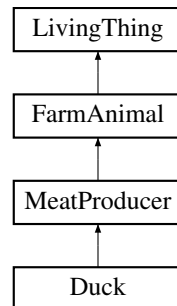
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/CowMeat.h

3.10 Duck Class Reference

```
#include <Duck.h>
```

Inheritance diagram for Duck:



3.10.1 *

Public Member Functions

- [Duck](#) ([Point](#) position, [Cell](#) ***&worldMap, int nRowCell, int nCollumnCell)
- [FarmProduct](#) * produceProduct ([Action](#))
- std::string makeNoise () const
- char render ()

3.10.2 *

Additional Inherited Members

3.10.3 Detailed Description

[Duck](#) merupakan kelas turunan dari [MeatProducer](#) yang menghasilkan [DuckMeat](#) saat diinteract

3.10.4 Constructor & Destructor Documentation

3.10.4.1 Duck()

```

Duck::Duck (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
  
```

Constructor

3.10.5 Member Function Documentation

3.10.5.1 makeNoise()

```
std::string Duck::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari [Duck](#)

Implements [FarmAnimal](#).

3.10.5.2 produceProduct()

```
FarmProduct* Duck::produceProduct (
    Action ) [virtual]
```

Mengembalikan FarmProduk yang akan dihasilkan [Duck](#) bila [Duck](#) di kill

Implements [FarmAnimal](#).

3.10.5.3 render()

```
char Duck::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan [Duck](#) saat Hungry dan tidak Hungry

Implements [LivingThing](#).

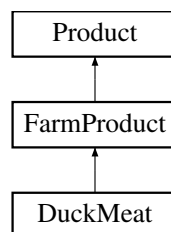
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/Duck.h

3.11 DuckMeat Class Reference

```
#include <DuckMeat.h>
```

Inheritance diagram for DuckMeat:



3.11.1 *

Public Member Functions

- int [getPrice](#) () const
- [Category getCategory](#) () const

3.11.2 *

Additional Inherited Members

3.11.3 Detailed Description

kelas turunan dari Farmproduct yang dihasilkan dengan interact dengan duck

3.11.4 Member Function Documentation

3.11.4.1 getCategory()

```
Category DuckMeat::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.11.4.2 getPrice()

```
int DuckMeat::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

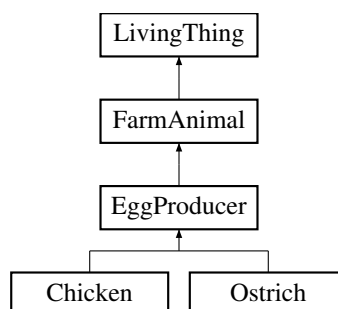
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/DuckMeat.h

3.12 EggProducer Class Reference

```
#include <EggProducer.h>
```

Inheritance diagram for EggProducer:



3.12.1 *

Public Member Functions

- [EggProducer](#) (int _maxTimeToGetHungry, [Point](#) position, [Cell](#) ***&[worldMap](#), int [nRowCell](#), int [nCollumnCell](#))
- virtual [~EggProducer](#) ()=0
- bool [getProduce](#) ()
- bool [getKillable](#) ()

3.12.2 *

Protected Attributes

- bool `canProduce` {false}

3.12.3 *

Additional Inherited Members

3.12.4 Detailed Description

`EggProducer` merupakan kelas abstrak turunan dari `FarmAnimal` yang tinggal di `Coop` dan menghasilkan Egg saat diinteract

3.12.5 Constructor & Destructor Documentation

3.12.5.1 `EggProducer()`

```
EggProducer::EggProducer (
    int _maxTimeToGetHungry,
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor `maxTimeToGetHungry` dengan nilai H

3.12.5.2 `~EggProducer()`

```
virtual EggProducer::~EggProducer ( ) [pure virtual]
```

Penerusan overloading (virtual) destruktur

3.12.6 Member Function Documentation

3.12.6.1 `getKillable()`

```
bool EggProducer::getKillable ( ) [virtual]
```

Mengembalikan false karena `EggProducer` tidak bisa di kill

Implements `FarmAnimal`.

3.12.6.2 getProduce()

```
bool EggProducer::getProduce ( ) [virtual]
```

Mengembalikan nilai dari canProduce

Implements [FarmAnimal](#).

3.12.7 Member Data Documentation

3.12.7.1 canProduce

```
bool EggProducer::canProduce {false} [protected]
```

Menentukan apakah [FarmAnimal](#) dapat menghasilkan produk apabila diinteract

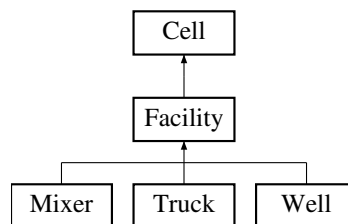
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/EggProducer.h

3.13 Facility Class Reference

```
#include <Facility.h>
```

Inheritance diagram for Facility:



3.13.1 *

Public Member Functions

- [Facility](#) ()
- virtual [~Facility](#) ()=0
- bool [isFacility](#) () const
- bool [isGrassExist](#) () const

3.13.2 *

Additional Inherited Members

3.13.3 Detailed Description

[Facility](#) merupakan kelas turunan dari [Cell](#) yang menampung utilitas untuk [Player](#) yaitu [Truck](#), [Mixer](#), dan [Well](#) dan tidak bisa ditempati oleh [LivingThing](#)

3.13.4 Constructor & Destructor Documentation

3.13.4.1 Facility()

```
Facility::Facility ( )
```

Constructor untuk set isOccupied jadi true

3.13.4.2 ~Facility()

```
virtual Facility::~~Facility ( ) [pure virtual]
```

Destructor [Land](#)

3.13.5 Member Function Documentation

3.13.5.1 isFacility()

```
bool Facility::isFacility ( ) const [virtual]
```

Return true bila [Land](#) adalah sebuah facility

Implements [Cell](#).

3.13.5.2 isGrassExist()

```
bool Facility::isGrassExist ( ) const [virtual]
```

Mengembalikan false

Implements [Cell](#).

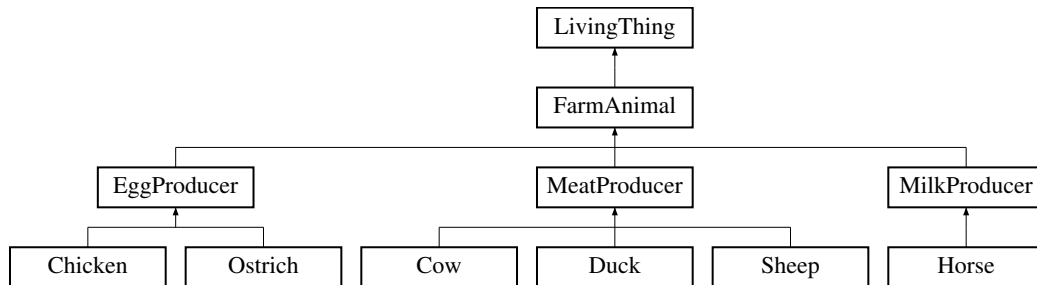
The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Facility.h

3.14 FarmAnimal Class Reference

```
#include <FarmAnimal.h>
```

Inheritance diagram for FarmAnimal:



3.14.1 *

Public Types

- enum [Action](#) { **INTERACT**, **KILL** }

3.14.2 *

Public Member Functions

- [FarmAnimal](#) (int _maxTimeToGetHungry, [Point](#) position, [Cell](#) ***&worldMap, int nRowCell, int nColumnCell)
- virtual [~FarmAnimal](#) ()=0
- void [tick](#) ()
- virtual [FarmProduct](#) * [produceProduct](#) ([Action](#))=0
- virtual std::string [makeNoise](#) () const =0
- bool [isDead](#) () const
- virtual bool [getProduce](#) ()=0
- virtual bool [getKillable](#) ()=0

3.14.3 *

Protected Member Functions

- virtual void [eat](#) ()
- bool [isHungry](#) () const

3.14.4 *

Protected Attributes

- int [timeToGetHungry](#)
- const int [maxTimeToGetHungry](#)

3.14.5 Detailed Description

kelas [FarmAnimal](#) merupakan kelas turunan dari living thing yang dapat berupa [EggProducer](#), [MilkProducer](#), dan [MeatProducer](#)

3.14.6 Member Enumeration Documentation

3.14.6.1 Action

```
enum FarmAnimal::Action
```

Jenis aksi yang dapat dilakukan ke [FarmAnimal](#)

3.14.7 Constructor & Destructor Documentation

3.14.7.1 FarmAnimal()

```
FarmAnimal::FarmAnimal (  
    int _maxTimeToGetHungry,  
    Point position,  
    Cell ***& worldMap,  
    int nRowCell,  
    int nCollumnCell )
```

Constructor maxTimeToGetHungry dengan nilai H

3.14.7.2 ~FarmAnimal()

```
virtual FarmAnimal::~FarmAnimal ( ) [pure virtual]
```

Destructor [FarmAnimal](#)

3.14.8 Member Function Documentation

3.14.8.1 eat()

```
virtual void FarmAnimal::eat ( ) [protected], [virtual]
```

Jika [FarmAnimal](#) sedang berdiri pada land dengan rumput, maka timeToDeath di set nilai semula dan timeToGdengan nilai sesuai dengan derived classnya, lalu grass di land dihapus

3.14.8.2 getKillable()

```
virtual bool FarmAnimal::getKillable ( ) [pure virtual]
```

Mengembalikan true jika [FarmAnimal](#) bisa di Kill untuk menghasilkan [Product](#)

Implemented in [MilkProducer](#), [EggProducer](#), and [MeatProducer](#).

3.14.8.3 `getProduce()`

```
virtual bool FarmAnimal::getProduce ( ) [pure virtual]
```

Mengembalikan true jika [FarmAnimal](#) bisa di Interact untuk menghasilkan [Product](#)

Implemented in [MeatProducer](#), [MilkProducer](#), and [EggProducer](#).

3.14.8.4 `isDead()`

```
bool FarmAnimal::isDead ( ) const
```

Mengembalikan true jika `timeToDeath == 0`, lalu di destruct di main atau di class world

3.14.8.5 `isHungry()`

```
bool FarmAnimal::isHungry ( ) const [protected]
```

return true apabila `timeToGetHungry <= 0`

3.14.8.6 `makeNoise()`

```
virtual std::string FarmAnimal::makeNoise ( ) const [pure virtual]
```

Mengembalikan suara dari [FarmAnimal](#)

Implemented in [Chicken](#), [Cow](#), [Duck](#), [Horse](#), [Ostrich](#), and [Sheep](#).

3.14.8.7 `produceProduct()`

```
virtual FarmProduct* FarmAnimal::produceProduct (
    Action ) [pure virtual]
```

Mengembalikan produk yang dihasilkan [FarmAnimal](#) apabila diinteract/dikill

Implemented in [Chicken](#), [Cow](#), [Duck](#), [Horse](#), [Ostrich](#), and [Sheep](#).

3.14.8.8 `tick()`

```
void FarmAnimal::tick ( )
```

Melakukan aksi yang dilakukan [FarmAnimal](#) setiap satuan waktu

3.14.9 Member Data Documentation

3.14.9.1 `maxTimeToGetHungry`

```
const int FarmAnimal::maxTimeToGetHungry [protected]
```

Nilai max dari `timeToGetHungry`

3.14.9.2 `timeToGetHungry`

```
int FarmAnimal::timeToGetHungry [protected]
```

Waktu [FarmAnimal](#) sampai menjadi lapar

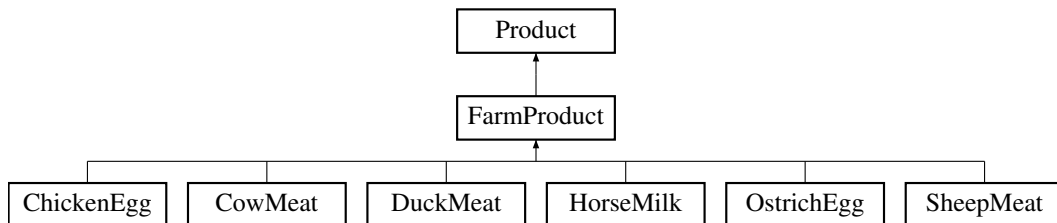
The documentation for this class was generated from the following file:

- `include/EngiFarm/FarmAnimal/FarmAnimal.h`

3.15 FarmProduct Class Reference

```
#include <FarmProduct.h>
```

Inheritance diagram for FarmProduct:



3.15.1 *

Additional Inherited Members

3.15.2 Detailed Description

[Product](#) yang didapat dari hasil interact / kill

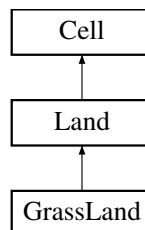
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/FarmProduct.h

3.16 GrassLand Class Reference

```
#include <GrassLand.h>
```

Inheritance diagram for GrassLand:



3.16.1 *

Public Member Functions

- [Category getCategory\(\)](#) const

3.16.2 *

Additional Inherited Members

3.16.3 Detailed Description

[GrassLand](#) merupakan kelas turunan dari [Land](#) yang hanya bisa ditempati oleh [Player](#) dan [MilkProducer](#)

3.16.4 Member Function Documentation

3.16.4.1 getCategory()

```
Category GrassLand::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements [Cell](#).

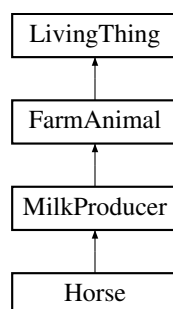
The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/GrassLand.h

3.17 Horse Class Reference

```
#include <Horse.h>
```

Inheritance diagram for Horse:



3.17.1 *

Public Member Functions

- [Horse](#) ([Point](#) position, [Cell](#) ***&[worldMap](#), int [nRowCell](#), int [nCollumnCell](#))
- [FarmProduct](#) * [produceProduct](#) ([Action](#))
- std::string [makeNoise](#) () const
- char [render](#) ()

3.17.2 *

Additional Inherited Members

3.17.3 Detailed Description

[Horse](#) merupakan kelas turunan dari [MilkProducer](#) yang menghasilkan [HorseMilk](#) saat diinteract

3.17.4 Constructor & Destructor Documentation

3.17.4.1 Horse()

```
Horse::Horse (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor

3.17.5 Member Function Documentation

3.17.5.1 makeNoise()

```
std::string Horse::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari [Horse](#)

Implements [FarmAnimal](#).

3.17.5.2 produceProduct()

```
FarmProduct* Horse::produceProduct (
    Action ) [virtual]
```

Mengembalikan FarmProduk yang akan dihasilkan [Horse](#) bila [Horse](#) di interact

Implements [FarmAnimal](#).

3.17.5.3 render()

```
char Horse::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan [Horse](#) saat Hungry dan tidak Hungry

Implements [LivingThing](#).

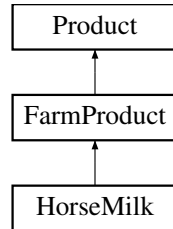
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/Horse.h

3.18 HorseMilk Class Reference

```
#include <HorseMilk.h>
```

Inheritance diagram for HorseMilk:



3.18.1 *

Public Member Functions

- int [getPrice](#) () const
- [Category getCategory](#) () const

3.18.2 *

Additional Inherited Members

3.18.3 Detailed Description

[HorseMilk](#) adalah kelas turunan dari [FarmProduct](#) yang dihasilkan dengan interact dengan [Horse](#)

3.18.4 Member Function Documentation

3.18.4.1 getCategory()

```
Category HorseMilk::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.18.4.2 getPrice()

```
int HorseMilk::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

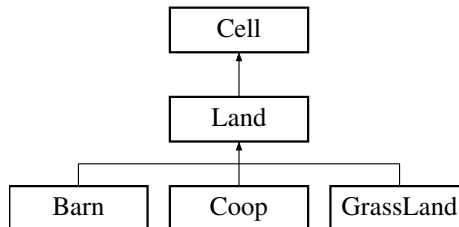
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/HorseMilk.h

3.19 Land Class Reference

```
#include <Land.h>
```

Inheritance diagram for Land:



3.19.1 *

Public Member Functions

- virtual [~Land](#) ()=0
- bool [isFacility](#) () const
- void [growGrass](#) ()
- void [removeGrass](#) ()
- bool [isGrassExist](#) () const

3.19.2 *

Additional Inherited Members

3.19.3 Detailed Description

[Land](#) merupakan kelas turunan dari [Cell](#) yang merepresentasikan petak-petak yang bisa ditempati oleh [LivingThing](#)

3.19.4 Constructor & Destructor Documentation

3.19.4.1 ~Land()

```
virtual Land::~~Land ( ) [pure virtual]
```

Destructor [Land](#)

3.19.5 Member Function Documentation

3.19.5.1 growGrass()

```
void Land::growGrass ( ) [virtual]
```

Membuat existGrass menjadi true

Reimplemented from [Cell](#).

3.19.5.2 isFacility()

```
bool Land::isFacility ( ) const [virtual]
```

Return true bila [Land](#) adalah sebuah facility

Implements [Cell](#).

3.19.5.3 isGrassExist()

```
bool Land::isGrassExist ( ) const [virtual]
```

Mengembalikan keberadaan grass

Implements [Cell](#).

3.19.5.4 removeGrass()

```
void Land::removeGrass ( ) [virtual]
```

Membuat existGrass menjadi false

Reimplemented from [Cell](#).

The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Land.h

3.20 LinkedList< T > Class Template Reference

```
#include <LinkedList.h>
```

3.20.1 *

Public Member Functions

- [LinkedList](#) ()
- [LinkedList](#) (std::initializer_list< T > args)
- [LinkedList](#) (const [LinkedList](#)< T > &l)
- [~LinkedList](#) ()
- [LinkedList](#)< T > & [operator=](#) (const [LinkedList](#)< T > &l)
- int [find](#) (T elm)
- int [findPointer](#) (T elm)
- bool [isEmpty](#) () const
- void [add](#) (T elm)
- void [remove](#) (T elm)
- void [removeIdx](#) (int idx)
- T & [get](#) (int idx)
- T & [operator\[\]](#) (int idx)
- void [print](#) ()
- int [len](#) ()

3.20.2 Detailed Description

```
template<class T>
class LinkedList< T >
```

Tipe data [LinkedList](#), diimplementasi secara rekursif dengan [LinkedListNode](#)

3.20.3 Constructor & Destructor Documentation

3.20.3.1 `LinkedList()` [1/3]

```
template<class T >
LinkedList< T >::LinkedList ( )
```

Konstruktor default [LinkedList](#), membuat empty list

3.20.3.2 `LinkedList()` [2/3]

```
template<class T>
LinkedList< T >::LinkedList (
    std::initializer_list< T > args )
```

Konstruktor dengan initializer list

3.20.3.3 `LinkedList()` [3/3]

```
template<class T>
LinkedList< T >::LinkedList (
    const LinkedList< T > & l )
```

Copy constructor [LinkedList](#)

3.20.3.4 `~LinkedList()`

```
template<class T >
LinkedList< T >::~~LinkedList ( )
```

Destructor [LinkedList](#)

3.20.4 Member Function Documentation

3.20.4.1 `add()`

```
template<class T>
void LinkedList< T >::add (
    T elm )
```

Menambah elm sebagai elemen terakhir

3.20.4.2 find()

```
template<class T>
int LinkedList< T >::find (
    T elm )
```

Mencari indeks pertama dari elm dari [LinkedList](#). Jika tidak ada, bernilai -1.

3.20.4.3 findPointer()

```
template<class T>
int LinkedList< T >::findPointer (
    T elm )
```

Mencari indeks pertama dari (*elm) dari [LinkedList](#) of pointer to Object. Jika tidak ada, bernilai -1.

3.20.4.4 get()

```
template<class T >
T & LinkedList< T >::get (
    int idx )
```

Mengembalikan elemen berindeks idx. Jika diluar range, melempar "Index out of range".

3.20.4.5 isEmpty()

```
template<class T >
bool LinkedList< T >::isEmpty ( ) const
```

Mengembalikan apakah list empty atau tidak

3.20.4.6 len()

```
template<class T >
int LinkedList< T >::len ( )
```

Mengembalikan panjang dari list

3.20.4.7 operator=()

```
template<class T>
LinkedList< T > & LinkedList< T >::operator= (
    const LinkedList< T > & l )
```

Operator= [LinkedList](#)

3.20.4.8 operator[]()

```
template<class T >
T & LinkedList< T >::operator[] (
    int idx )
```

Mengembalikan reference ke elemen berindeks idx. Jika diluar range, melempar "Index out of range".

3.20.4.9 `print()`

```
template<class T >
void LinkedList< T >::print ( )
```

Menampilkan isi dari list ke layar

3.20.4.10 `remove()`

```
template<class T>
void LinkedList< T >::remove (
    T elm )
```

Menghapus keberadaan pertama elm

3.20.4.11 `removeIdx()`

```
template<class T >
void LinkedList< T >::removeIdx (
    int idx )
```

Menghapus elemen berindeks idx. Jika diluar range, melempar "Index out of range".

The documentation for this class was generated from the following file:

- `include/EngiFarm/LinkedList.h`

3.21 `LinkedListNode< T >` Class Template Reference

```
#include <LinkedList.h>
```

3.21.1 *

Public Member Functions

- [LinkedListNode](#) (T _head, [LinkedListNode](#)< T > *_next=nullptr)
- [~LinkedListNode](#) ()

3.21.2 *

Public Attributes

- friend [LinkedList](#)< T >

3.21.3 Detailed Description

```
template<class T>
class LinkedListNode< T >
```

[LinkedList](#) adalah kelas generik yang merepresentasikan daftar suatu objek Forward declaration dari kelas [LinkedListNode](#)

Anggota kelas implementasi [LinkedList](#) secara rekursifs

3.21.4 Constructor & Destructor Documentation

3.21.4.1 LinkedListNode()

```
template<class T>
LinkedListNode< T >::LinkedListNode (
    T _head,
    LinkedListNode< T > * _next = nullptr )
```

Konstruktur `LinkedListNode` dengan argume, deafult tail = nullptr

3.21.4.2 ~LinkedListNode()

```
template<class T >
LinkedListNode< T >::~~LinkedListNode ( )
```

dtor

3.21.5 Member Data Documentation

3.21.5.1 LinkedList< T >

```
template<class T>
friend LinkedListNode< T >::LinkedList< T >
```

Membuat `LinkedList` dapat mengakses head dan tail

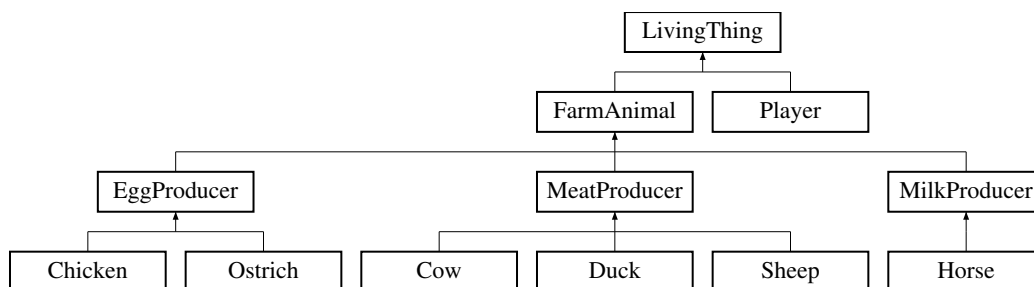
The documentation for this class was generated from the following file:

- include/EngiFarm/LinkedList.h

3.22 LivingThing Class Reference

```
#include <LivingThing.h>
```

Inheritance diagram for LivingThing:



3.22.1 *

Public Member Functions

- `LivingThing` (`Point` position, `Cell ***&worldMap`, `int nRowCell`, `int nColumnCell`)
- `virtual ~LivingThing` ()=0
- `Point getPosition` () const
- `void move` (Direction toWhere)
- `virtual char render` ()=0

3.22.2 *

Protected Attributes

- [Cell](#) ***& [worldMap](#)
- int [nRowCell](#)
- int [nCollumnCell](#)

3.22.3 Detailed Description

[LivingThing](#) adalah kelas abstrak yang merepresentasikan makhluk hidup berupa [Player](#) dan [FarmAnimal](#)

3.22.4 Constructor & Destructor Documentation

3.22.4.1 LivingThing()

```
LivingThing::LivingThing (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor [LivingThing](#)

3.22.4.2 ~LivingThing()

```
virtual LivingThing::~LivingThing ( ) [pure virtual]
```

Destructor dari [LivingThing](#)

3.22.5 Member Function Documentation

3.22.5.1 getPosition()

```
Point LivingThing::getPosition ( ) const
```

Mengembalikan position

3.22.5.2 move()

```
void LivingThing::move (
    Direction toWhere )
```

Berpindah ke suatu lokasi. Apabila tidak bisa (!canMoveTo), throw "Cannot move to the direction".

3.22.5.3 render()

```
virtual char LivingThing::render ( ) [pure virtual]
```

Mengembalikan char untuk dirender ke layar

Implemented in [Player](#), [Chicken](#), [Cow](#), [Duck](#), [Horse](#), [Ostrich](#), and [Sheep](#).

3.22.6 Member Data Documentation

3.22.6.1 nColumnCell

```
int LivingThing::nColumnCell [protected]
```

Nilai efektif kolom untuk Matriks [Cell](#)

3.22.6.2 nRowCell

```
int LivingThing::nRowCell [protected]
```

Nilai efektif baris untuk Matriks [Cell](#)

3.22.6.3 worldMap

```
Cell***& LivingThing::worldMap [protected]
```

Representasi dunia tempat [LivingThing](#) tinggal

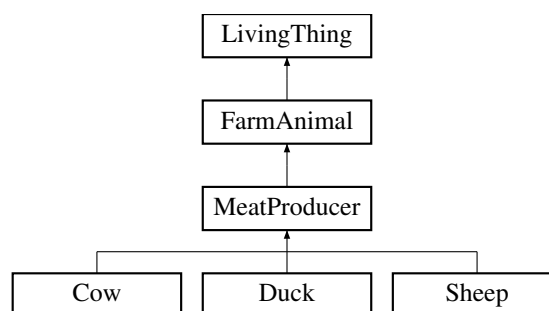
The documentation for this class was generated from the following file:

- include/EngiFarm/LivingThing.h

3.23 MeatProducer Class Reference

```
#include <MeatProducer.h>
```

Inheritance diagram for MeatProducer:



3.23.1 *

Public Member Functions

- [MeatProducer](#) (int _maxTimeToGetHungry, [Point](#) position, [Cell](#) ***&worldMap, int nRowCell, int nColumnCell)
- virtual [~MeatProducer](#) ()=0
- bool [getKillable](#) ()
- bool [getProduce](#) ()

3.23.2 *

Additional Inherited Members

3.23.3 Detailed Description

[MeatProducer](#) adalah kelas abstrak turunan dari [FarmAnimal](#) yang tinggal di barn dan dapat menghasilkan daging jika dilakukan aksi kill

3.23.4 Constructor & Destructor Documentation

3.23.4.1 MeatProducer()

```
MeatProducer::MeatProducer (
    int _maxTimeToGetHungry,
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor maxTimeToGetHungry dengan nilai H

3.23.4.2 ~MeatProducer()

```
virtual MeatProducer::~~MeatProducer ( ) [pure virtual]
```

Penerusan overloading (virtual) destruktur

3.23.5 Member Function Documentation

3.23.5.1 getKillable()

```
bool MeatProducer::getKillable ( ) [virtual]
```

Mengembalikan nilai dari killable

Implements [FarmAnimal](#).

3.23.5.2 getProduce()

```
bool MeatProducer::getProduce ( ) [virtual]
```

Mengembalikan false karena [MeatProducer](#) tidak bisa di Interact

Implements [FarmAnimal](#).

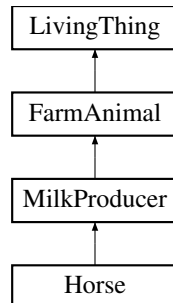
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/MeatProducer.h

3.24 MilkProducer Class Reference

```
#include <MilkProducer.h>
```

Inheritance diagram for MilkProducer:



3.24.1 *

Public Member Functions

- [MilkProducer](#) (int _maxTimeToGetHungry, [Point](#) position, [Cell](#) ***&[worldMap](#), int nRowCell, int nColumnCell)
- virtual [~MilkProducer](#) ()=0
- bool [getProduce](#) ()
- bool [getKillable](#) ()

3.24.2 *

Protected Attributes

- bool [canProduce](#) = false

3.24.3 *

Additional Inherited Members

3.24.4 Detailed Description

[MilkProducer](#) adalah kelas abstrak turunan dari [FarmAnimal](#) yang tinggal di [GrassLand](#) dan dapat menghasilkan [Product](#) berupa Milk jika di Interact

3.24.5 Constructor & Destructor Documentation

3.24.5.1 MilkProducer()

```
MilkProducer::MilkProducer (
    int _maxTimeToGetHungry,
```

```

    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )

```

Constructor maxTimeToGetHungry dengan nilai H

3.24.5.2 ~MilkProducer()

```
virtual MilkProducer::~MilkProducer ( ) [pure virtual]
```

Penerusan overloading (virtual) destruktur

3.24.6 Member Function Documentation

3.24.6.1 getKillable()

```
bool MilkProducer::getKillable ( ) [virtual]
```

Mengembalikan false karena [MilkProducer](#) tidak bisa di kill

Implements [FarmAnimal](#).

3.24.6.2 getProduce()

```
bool MilkProducer::getProduce ( ) [virtual]
```

Mengembalikan nilai dari canProduce

Implements [FarmAnimal](#).

3.24.7 Member Data Documentation

3.24.7.1 canProduce

```
bool MilkProducer::canProduce = false [protected]
```

Menentukan apakah [FarmAnimal](#) dapat menghasilkan produk apabila diinteract

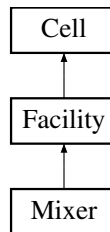
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/MilkProducer.h

3.25 Mixer Class Reference

```
#include <Mixer.h>
```

Inheritance diagram for Mixer:



3.25.1 *

Public Member Functions

- [Category getCategory \(\)](#) const

3.25.2 *

Additional Inherited Members

3.25.3 Detailed Description

[Mixer](#) merupakan kelas turunan dari [Facility](#) yang digunakan untuk membuat [SideProduct](#)

3.25.4 Member Function Documentation

3.25.4.1 getCategory()

```
Category Mixer::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements [Cell](#).

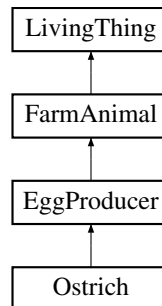
The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Mixer.h

3.26 Ostrich Class Reference

```
#include <Ostrich.h>
```

Inheritance diagram for Ostrich:



3.26.1 *

Public Member Functions

- [Ostrich](#) ([Point](#) position, [Cell](#) ***&worldMap, int nRowCell, int nCollumnCell)
- [FarmProduct](#) * [produceProduct](#) ([Action](#))
- std::string [makeNoise](#) () const
- char [render](#) ()

3.26.2 *

Additional Inherited Members

3.26.3 Detailed Description

[Ostrich](#) merupakan kelas turunan dari [EggProducer](#) yang menghasilkan [OstrichEgg](#) saat diinteract

3.26.4 Constructor & Destructor Documentation

3.26.4.1 Ostrich()

```
Ostrich::Ostrich (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor

3.26.5 Member Function Documentation

3.26.5.1 makeNoise()

```
std::string Ostrich::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari [Chicken](#)

Implements [FarmAnimal](#).

3.26.5.2 produceProduct()

```
FarmProduct* Ostrich::produceProduct (
    Action ) [virtual]
```

Mengembalikan FarmProduk yang akan dihasilkan [Ostrich](#) bila [Ostrich](#) di interact

Implements [FarmAnimal](#).

3.26.5.3 render()

```
char Ostrich::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan [Ostrich](#) saat Hungry dan tidak Hungry

Implements [LivingThing](#).

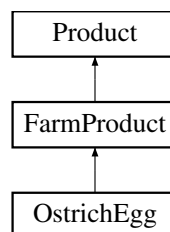
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/Ostrich.h

3.27 OstrichEgg Class Reference

```
#include <OstrichEgg.h>
```

Inheritance diagram for OstrichEgg:



3.27.1 *

Public Member Functions

- int [getPrice](#) () const
- [Category getCategory](#) () const

3.27.2 *

Additional Inherited Members

3.27.3 Detailed Description

[OstrichEgg](#) adalah kelas turunan dari [FarmProduct](#) yang dihasilkan dengan interact dengan [Ostrich](#)

3.27.4 Member Function Documentation

3.27.4.1 getCategory()

```
Category OstrichEgg::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.27.4.2 getPrice()

```
int OstrichEgg::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

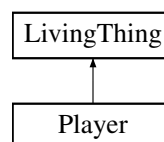
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/OstrichEgg.h

3.28 Player Class Reference

```
#include <Player.h>
```

Inheritance diagram for Player:



3.28.1 *

Public Member Functions

- [Player](#) ([Point](#) position, [Cell](#) ***&worldMap, int nRowCell, int nColumnCell)
- [~Player](#) ()
- void [talk](#) ([LinkedList](#)< [FarmAnimal](#) * > &farmAnimal, [LinkedList](#)< std::string > &mesQueue)
- void [interact](#) ([LinkedList](#)< [FarmAnimal](#) * > &farmAnimal)
- void [kill](#) ([LinkedList](#)< [FarmAnimal](#) * > &farmAnimal, int &nAnimal)
- void [grow](#) ([LinkedList](#)< std::string > &mesQueue)
- void [mix](#) ([LinkedList](#)< std::string > &mesQueue)
- char [render](#) ()
- void [takeWater](#) ()
- void [sellAll](#) ()
- int [getMoney](#) ()
- int [getWater](#) ()
- [LinkedList](#)< [Product](#) * > & [getInventory](#) ()
- [LinkedList](#)< [SideProduct](#) * > [getrecipeBook](#) ()

3.28.2 *

Additional Inherited Members

3.28.3 Detailed Description

[Player](#) adalah kelas yang merepresentasikan pemain dengan semua aksinya di dunia

3.28.4 Constructor & Destructor Documentation

3.28.4.1 [Player\(\)](#)

```
Player::Player (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor [Player](#) di position, recipeBook diinisialisasi dengan semua [SideProduct](#) yang terdefinisi

3.28.4.2 [~Player\(\)](#)

```
Player::~~Player ( )
```

Destructor [Player](#)

3.28.5 Member Function Documentation

3.28.5.1 [getInventory\(\)](#)

```
LinkedList<Product*>& Player::getInventory ( )
```

Getter inventory yang dipegang [Player](#)

3.28.5.2 [getMoney\(\)](#)

```
int Player::getMoney ( )
```

Getter banyak uang yang dimiliki [Player](#)

3.28.5.3 [getrecipeBook\(\)](#)

```
LinkedList<SideProduct*> Player::getrecipeBook ( )
```

Getter daftar resep yang dimiliki [Player](#)

3.28.5.4 [getWater\(\)](#)

```
int Player::getWater ( )
```

Getter banyak air yang dimiliki [Player](#)

3.28.5.5 grow()

```
void Player::grow (
    LinkedList< std::string > & mesQueue )
```

Menumbuhkan rumput pada cell yang sedang ditempati oleh [Player](#)

3.28.5.6 interact()

```
void Player::interact (
    LinkedList< FarmAnimal * > & farmAnimal )
```

[Player](#) mengambil [FarmProduct](#) dari semua [FarmAnimal](#) terdekat tanpa membunuh [FarmAnimal](#) tersebut. Bekerja untuk [FarmAnimal](#) jenis MilkProducing dan EggProducing. Contoh [FarmProduct](#) : [ChickenEgg](#), [CowMilk](#).

3.28.5.7 kill()

```
void Player::kill (
    LinkedList< FarmAnimal * > & farmAnimal,
    int & nAnimal )
```

[Player](#) mengambil [FarmProduct](#) dari semua [FarmAnimal](#) terdekat dengan cara membunuh [FarmAnimal](#) tersebut. Bekerja untuk [FarmAnimal](#) jenis MeatProducing. Contoh [FarmProduct](#) : [CowMeat](#), [ChickenMeat](#).

3.28.5.8 mix()

```
void Player::mix (
    LinkedList< std::string > & mesQueue )
```

Menciptakan [SideProduct](#) dari [FarmProduct](#) bila [Player](#) dekat dengan mixer

3.28.5.9 render()

```
char Player::render ( ) [virtual]
```

Mengembalikan char untuk dirender ke layar

Implements [LivingThing](#).

3.28.5.10 sellAll()

```
void Player::sellAll ( )
```

Menjual semua product di inventory

3.28.5.11 takeWater()

```
void Player::takeWater ( )
```

Mengambil air dari well

3.28.5.12 talk()

```
void Player::talk (
    LinkedList< FarmAnimal * > & farmAnimal,
    LinkedList< std::string > & mesQueue )
```

[Player](#) berbicara dengan semua [FarmAnimal](#) terdekat.

The documentation for this class was generated from the following file:

- include/EngiFarm/Player.h

3.29 Point Struct Reference

```
#include <Point.h>
```

3.29.1 *

Public Attributes

- int [x](#)
- int [y](#)

3.29.2 Detailed Description

[Point](#) adalah suatu struktur data yang menyimpan posisi di bidang 2 dimensi

3.29.3 Member Data Documentation

3.29.3.1 x

```
int Point::x
```

Absis dari poin

3.29.3.2 y

```
int Point::y
```

Ordinat dari poin

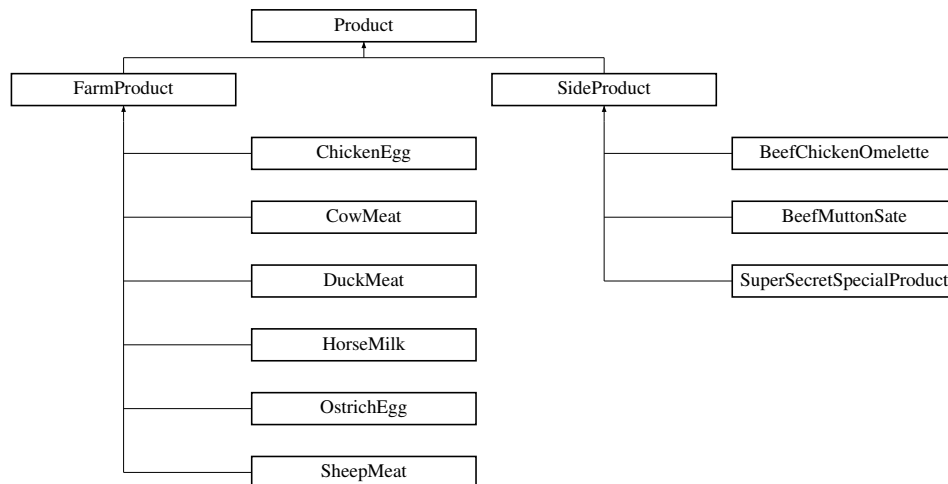
The documentation for this struct was generated from the following file:

- include/EngiFarm/Point.h

3.30 Product Class Reference

```
#include <Product.h>
```

Inheritance diagram for Product:



3.30.1 *

Public Types

- enum [Category](#) {
**CHICKENEGG, BEEFCHICKENOMELETTE, BEEFMUTONSATE, COWMEAT,
 DUCKMEAT, HORSEMILK, OSTRICHEGG, SHEEPMEAT,
 SUPERSECRETSPECIALPRODUCT** }

3.30.2 *

Public Member Functions

- virtual int [getPrice](#) () const =0
- virtual [Category](#) [getCategory](#) () const =0
- bool [operator==](#) ([Product](#) &P)
- bool [operator!=](#) ([Product](#) &P)

3.30.3 Detailed Description

[Product](#) adalah kelas abstrak yang merepresentasikan produk yang bisa dibuat dan dijual player

3.30.4 Member Enumeration Documentation

3.30.4.1 Category

```
enum Product::Category
```

enumerasi kategori dari suatu produk, return value dari getCategory

3.30.5 Member Function Documentation

3.30.5.1 getCategory()

```
virtual Category Product::getCategory ( ) const [pure virtual]
```

mengembalikan kategori dari produk ini

Implemented in [BeefChickenOmelette](#), [BeefMuttonSate](#), [SuperSecretSpecialProduct](#), [ChickenEgg](#), [CowMeat](#), [HorseMilk](#), [OstrichEgg](#), [SheepMeat](#), and [DuckMeat](#).

3.30.5.2 getPrice()

```
virtual int Product::getPrice ( ) const [pure virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implemented in [BeefChickenOmelette](#), [BeefMuttonSate](#), [SuperSecretSpecialProduct](#), [ChickenEgg](#), [CowMeat](#), [HorseMilk](#), [OstrichEgg](#), [SheepMeat](#), and [DuckMeat](#).

3.30.5.3 operator!=(())

```
bool Product::operator!= (
    Product & P )
```

Mengembalikan hasil perbandingan dereference

3.30.5.4 operator==(())

```
bool Product::operator== (
    Product & P )
```

Mengembalikan hasil perbandingan dereference

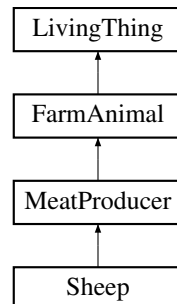
The documentation for this class was generated from the following file:

- [include/EngiFarm/Product/Product.h](#)

3.31 Sheep Class Reference

```
#include <Sheep.h>
```

Inheritance diagram for Sheep:



3.31.1 *

Public Member Functions

- [Sheep](#) ([Point](#) position, [Cell](#) ***&[worldMap](#), int [nRowCell](#), int [nCollumnCell](#))
- [FarmProduct](#) * [produceProduct](#) ([Action](#))
- [std::string](#) [makeNoise](#) () const
- [char](#) [render](#) ()

3.31.2 *

Additional Inherited Members

3.31.3 Detailed Description

[Sheep](#) merupakan kelas turunan dari [MeatProducer](#) yang menghasilkan [SheepMeat](#) saat diinteract

3.31.4 Constructor & Destructor Documentation

3.31.4.1 Sheep()

```

Sheep::Sheep (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )

```

Constructor

3.31.5 Member Function Documentation

3.31.5.1 makeNoise()

```
std::string Sheep::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari [Sheep](#)

Implements [FarmAnimal](#).

3.31.5.2 produceProduct()

```
FarmProduct* Sheep::produceProduct (
    Action ) [virtual]
```

Mengembalikan FarmProduk yang akan dihasilkan [Sheep](#) bila [Sheep](#) di kill

Implements [FarmAnimal](#).

3.31.5.3 render()

```
char Sheep::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan [Sheep](#) saat Hungry dan tidak Hungry

Implements [LivingThing](#).

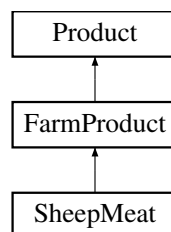
The documentation for this class was generated from the following file:

- include/EngiFarm/FarmAnimal/Sheep.h

3.32 SheepMeat Class Reference

```
#include <SheepMeat.h>
```

Inheritance diagram for SheepMeat:



3.32.1 *

Public Member Functions

- int [getPrice](#) () const
- [Category getCategory](#) () const

3.32.2 *

Additional Inherited Members

3.32.3 Detailed Description

[SheepMeat](#) adalah kelas turunan dari [FarmProduct](#) yang dihasilkan dengan kill [Sheep](#)

3.32.4 Member Function Documentation

3.32.4.1 getCategory()

```
Category SheepMeat::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.32.4.2 getPrice()

```
int SheepMeat::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

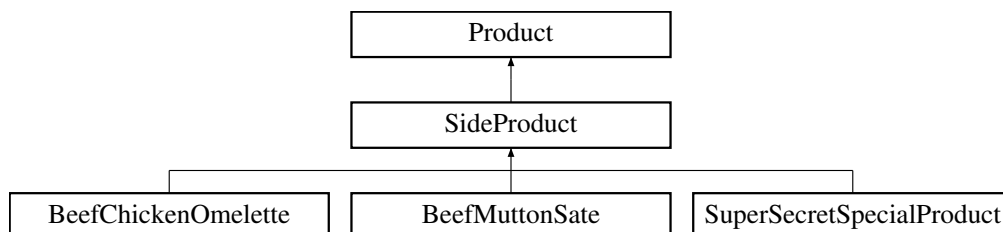
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/SheepMeat.h

3.33 SideProduct Class Reference

```
#include <SideProduct.h>
```

Inheritance diagram for SideProduct:



3.33.1 *

Public Member Functions

- virtual [LinkedList< Product * > & getRecipe](#) ()=0
- virtual [~SideProduct](#) ()

3.33.2 *

Additional Inherited Members

3.33.3 Detailed Description

[SideProduct](#) adalah kelas abstrak turunan dari kelas [Product](#) yang didapat dari hasil mix

3.33.4 Constructor & Destructor Documentation

3.33.4.1 ~SideProduct()

```
virtual SideProduct::~~SideProduct ( ) [virtual]
```

Destructor side product

3.33.5 Member Function Documentation

3.33.5.1 getRecipe()

```
virtual LinkedList<Product*>& SideProduct::getRecipe ( ) [pure virtual]
```

Mengembalikan resep dari produk

Implemented in [BeefChickenOmelette](#), [BeefMuttonSate](#), and [SuperSecretSpecialProduct](#).

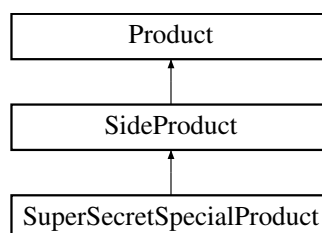
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/SideProduct.h

3.34 SuperSecretSpecialProduct Class Reference

```
#include <SuperSecretSpecialProduct.h>
```

Inheritance diagram for SuperSecretSpecialProduct:



3.34.1 *

Public Member Functions

- [SuperSecretSpecialProduct](#) ()
- int [getPrice](#) () const
- [Category](#) [getCategory](#) () const
- [LinkedList](#)< [Product](#) * > & [getRecipe](#) ()

3.34.2 *

Additional Inherited Members

3.34.3 Detailed Description

[SuperSecretSpecialProduct](#) adalah kelas turunan dari [SideProduct](#) yang dihasilkan dengan mix [HorseMilk](#) dan [OstrichEgg](#)

3.34.4 Constructor & Destructor Documentation

3.34.4.1 SuperSecretSpecialProduct()

```
SuperSecretSpecialProduct::SuperSecretSpecialProduct ( )
```

Constructor untuk inisialisasi recipe

3.34.5 Member Function Documentation

3.34.5.1 getCategory()

```
Category SuperSecretSpecialProduct::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements [Product](#).

3.34.5.2 getPrice()

```
int SuperSecretSpecialProduct::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements [Product](#).

3.34.5.3 getRecipe()

```
LinkedList<Product*>& SuperSecretSpecialProduct::getRecipe ( ) [virtual]
```

Mengembalikan resep dari produk

Implements [SideProduct](#).

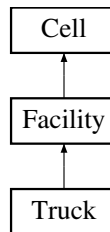
The documentation for this class was generated from the following file:

- include/EngiFarm/Product/SuperSecretSpecialProduct.h

3.35 Truck Class Reference

```
#include <Truck.h>
```

Inheritance diagram for Truck:



3.35.1 *

Public Member Functions

- [Category getCategory \(\)](#) const

3.35.2 *

Additional Inherited Members

3.35.3 Detailed Description

[Truck](#) merupakan kelas turunan dari [Facility](#) yang dapat digunakan untuk menjual seluruh barang di inventori

3.35.4 Member Function Documentation

3.35.4.1 getCategory()

```
Category Truck::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements [Cell](#).

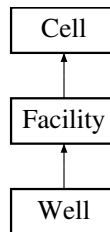
The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Truck.h

3.36 Well Class Reference

```
#include <Well.h>
```

Inheritance diagram for Well:



3.36.1 *

Public Member Functions

- [Category getCategory \(\)](#) const

3.36.2 *

Additional Inherited Members

3.36.3 Detailed Description

[Well](#) merupakan kelas turunan dari [Facility](#) yang digunakan untuk memberi Water untuk [Player](#)

3.36.4 Member Function Documentation

3.36.4.1 getCategory()

```
Category Well::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements [Cell](#).

The documentation for this class was generated from the following file:

- include/EngiFarm/Cell/Well.h

3.37 World Class Reference

```
#include <World.h>
```

3.37.1 *

Public Member Functions

- [World](#) ()
- [~World](#) ()
- void [Input](#) ()
- void [Update](#) ()
- void [Draw](#) ()

3.37.2 Detailed Description

[World](#) adalah kelas yang merepresentasikan dunia yang menyimpan semua [Cell](#) dan [LivingThing](#) di dalamnya

3.37.3 Constructor & Destructor Documentation

3.37.3.1 [World](#)()

```
World::World ( )
```

Constructor [World](#). Memanggil ctor dan menginisialisasi semua atribut world; Pertama, map diinisialisasi sesuai dengan spesifikasi, saat penginisialisasian map, ctor untuk object riil dari cell seperti coop, barn, dan well dipanggil Kedua, ctor [Player](#) dipanggil dengan argumen [Point](#) lokasi awal player dan reference ke map yang sudah didefinisikan pada tahap pertama Terakhir, animalList diinisialisasi dengan beberapa [FarmAnimal](#) secara random

3.37.3.2 [~World](#)()

```
World::~~World ( )
```

Destructor [World](#). Dealokasi seluruh [Cell](#) dan [FarmAnimal](#), termasuk seluruh pointer yang berhubungan.

3.37.4 Member Function Documentation

3.37.4.1 [Draw](#)()

```
void World::Draw ( )
```

Megambarkan representasi state program ([World](#)) seperti lokasi setiap objek, money, water, dan Inventory [Player](#), dsb ke layar.

3.37.4.2 [Input](#)()

```
void World::Input ( )
```

Membaca input user dari stdin lalu melakukan aksi sesuai dengan spesifikasi, misal, input == MOVELEFT, maka akan dipanggil pl.move(LEFT). Bila input == INTERACT, maka akan dipanggil pl.interact(animalList), dsb.

3.37.4.3 [Update](#)()

```
void World::Update ( )
```

Pada [World::Update\(\)](#), setiap fungsi yang dipanggil secara berkala seperti [FarmAnimal::tick\(\)](#) akan dipanggil.

The documentation for this class was generated from the following file:

- include/EngiFarm/World.h

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